

**In the Claims**

Claims 1-28 (canceled).

29. (original) A radiological imaging method, comprising the steps of:  
detecting the X-ray passing through a test object administered with  
radiopharmaceutical; and  
detecting a  $\gamma$ -ray emitted from said test object due to said  
radiopharmaceutical in said test object at a position of said test object irradiated with the X-  
ray.

30. (original) The radiological imaging method according to claim 29, wherein  
said  $\gamma$ -ray is emitted from a part where an X-ray passes through in said test object.

31. (original) The radiological imaging method according to claim 29, further  
comprising a step of producing tomographic image information using first information  
obtained from said  $\gamma$ -ray detection signal and second information obtained from said X-ray  
detection signal.

32. (original) A radiological imaging method, comprising the steps of:  
detecting a  $\gamma$ -ray emitted from a part where radiopharmaceutical concentrates  
in a test object;  
irradiating an X-ray onto said test object and detecting an X-ray passing  
through the part, said test object being placed on a bed when radiation is detected;  
detecting the  $\gamma$ -ray emitted from the part while said bed on which said test  
object is placed exists on a position for detecting the X-ray passing through the part.

33. (original) The radiological imaging method according to claim 32, further  
comprising a step of detecting said  $\gamma$ -ray and said X-ray using a common radiation detector.

34. (original) The radiological imaging method according to claim 32, further  
comprising a step of moving an X-ray source for emitting the X-ray around said test object  
when said X-ray is detected.

35. (original) A radiological imaging method, comprising the steps of:  
detecting a  $\gamma$ -ray emitted from a part where radiopharmaceutical concentrates in a test object;  
irradiating an X-ray onto said test object and detecting an X-ray passing through the part, said test object being placed on a bed when radiation is detected;  
detecting the  $\gamma$ -ray using a  $\gamma$ -ray detecting section including a plurality of radiation detectors aligned substantially in parallel with the longitudinal direction of said bed; and  
irradiating the X-ray to the part of said test object through gaps formed on said  $\gamma$ -ray detecting section.

36. (original) The radiological imaging method according to claim 35, further comprising a step of detecting an X-ray passing through the part of said test object using an X-ray detecting section through the gaps formed on said  $\gamma$ -ray detecting section.

37. (original) The radiological imaging method according to claim 35, further comprising a step of moving an X-ray source for emitting the X-ray, substantially in parallel with the longitudinal direction of said bed.

38. (original) A radiological imaging method, comprising the steps of:  
detecting a  $\gamma$ -ray emitted from a part where radiopharmaceutical concentrates in a test object;  
irradiating an X-ray onto said test object and detecting an X-ray passing through the part, said test object being placed on a bed when radiation is detected;  
detecting the  $\gamma$ -ray using a  $\gamma$ -ray detecting section including a plurality of radiation detectors aligned substantially in parallel with the longitudinal direction of said bed; and  
irradiating the X-ray onto test object between one end and the other end of said  $\gamma$ -ray detecting section in the direction.

39. (original) A radiological imaging method, comprising the steps of:

detecting a  $\gamma$ -ray emitted from said test object during a radiological imaging examination period for obtaining a  $\gamma$ -ray detection signal required for production of tomographic image information of said test object; and

detecting an X-ray passing through said test object during said radiological imaging examination period.

40. (original) The radiological imaging method according to claim 39, further comprising the steps of:

producing first tomographic image information using first information obtained from the  $\gamma$ -ray detection signal;

producing second tomographic image information using second information obtained from the X-ray detection signal; and

producing third tomographic image information including said first tomographic image information and said second tomographic image information on said test object.

41. (original) The radiological imaging method according to claim 39, further comprising the steps of:

inputting the  $\gamma$ -ray detection signal to a  $\gamma$ -ray detection signal processor; and  
inputting the X-ray detection signal to an X-ray detection signal processor.

42. (original) The radiological imaging method according to claim 39, further comprising a step of detecting the X-ray in a part of said radiological imaging examination period.

43. (original) The radiological imaging method according to claim 39, wherein radiation detectors for detecting the  $\gamma$ -ray are used as said radiation detectors for detecting the X-ray.

44. (original) A radiological imaging method, comprising the steps of:  
detecting a  $\gamma$ -ray emitted from a test object using a plurality of radiation detectors placed in a radiological imaging apparatus; and  
detecting an X-ray passing through said test object using some of said radiation detectors at some point.

45. (original) A radiological imaging method, comprising the steps of:  
detecting an X-ray passing through the test object using some of a plurality of radiation detectors provided in a radiological imaging apparatus; and  
detecting a  $\gamma$ -ray emitted from said test object using said radiation detectors other than some radiation detectors when some radiation detectors detect the X-ray.

46. (original) The radiological imaging method according to claim 44, further comprising the steps of:  
producing first tomographic image information on said test object based on the  $\gamma$ -ray detection signal;  
producing second tomographic image information on said test object based on the X-ray detection signal; and  
producing third tomographic image information on said test object, said third tomographic image information including said first tomographic image information and second tomographic image information.

47. (original) The radiological imaging method according to claim 44, wherein radiation detectors for detecting the  $\gamma$ -ray are used as said radiation detectors for detecting

the X-ray.

48. (original) The radiological imaging method according to claim 47, further comprising the steps of:

inputting a detection signal of the  $\gamma$ -ray to a  $\gamma$ -ray detection signal processor;  
detecting an X-ray passing through said test object; and  
inputting a detection signal of the X-ray to an X-ray detection signal

processor.

49. (original) The radiological imaging method according to claim 39, further comprising a step of moving an X-ray source within an examination range set in a longitudinal direction of said test object, said X-ray source emitting an X-ray to be irradiated onto said test object.

Claims 50-53 (canceled).